

Date: Monday, 3/5/2007 4:23:05 PM
 User: Kim Johnston

Process Sheet

Customer	CU-DAR001 Dart Helicopters Services		Drawing Name	TUBE	
Job Number	31019				
Estimate Number	12773				
P.O. Number	N/A		Part Number	41232 200 002 001	
This Issue	3/5/2007	S.O. No.	N/A	Drawing Number	41232-200-002 REV A
Prsht Rev.	NC	Type	MACHINED PARTS	Project Number	N/A
First Issue	N/A			Drawing Revision	A
Previous Run	N/A			Material	N/A
Written By			Due Date	3/30/2007	Qty:
Checked & Approved By	JL 07.03.06		Um:	13. Each	
Comment	Est Rev:A New Issue 07-03-05 JLM				

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	M2024T3H1375	2024-T3 Hex Bar 1.375"
	Comment: Qty.: 0.4550 f(s)/Unit Total : 5.4596 f(s) 2024-T3 Hex Bar 1.375" Batch: 11103753	<i>JL 07-03-20 (13)</i>
2.0	LATHE CONV.	CONVENTIONAL LATHE
	Comment: CONVENTIONAL LATHE Turn as per Dwg 41232-200-0021	<i>JL 07-03-20 (13)</i>
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
	Comment: INSPECT PARTS AS THEY COME OFF MACHINE	<i>JL 07-03-20 (13)</i>
4.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
	Comment: CONVENTIONAL MILLING MACHINE Mill as per Dwg 41232-200-002	<i>JL 07-03-20 (13)</i>
	2-Deburr	
5.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
	Comment: INSPECT PARTS AS THEY COME OFF MACHINE	<i>JL 07-03-20 (13)</i>
6.0	QC8	SECOND CHECK
	Comment: SECOND CHECK	<i>JL 07-03-20 (13)</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 3/5/2007 4:23:05 PM
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE

Job Number: 31019

Part Number: 41232 200 002 001

Job Number:



Seq. #: Machine Or Operation:

Description :

7.0 OUTSIDE SERVICE OUTSIDE SERVICES



Comment: Sub-Contracting PURCHASING

Issue P/O: 3360

Col 07/03/20

Black Anodize as per Dwg 41232-200-005

Ensure Certificate of Conformity is attached

(13)

8.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure certificate of conformity is attached

Op 07/03/27 (13)

9.0 QC3 INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

SB 07 10 4/03 (13)

10.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

G A T O O R

11.0 QC21 FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

R 07/10 4/13

(B)

Job Completion



U

07 24 13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

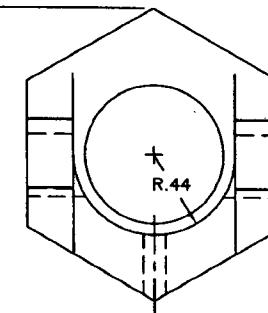
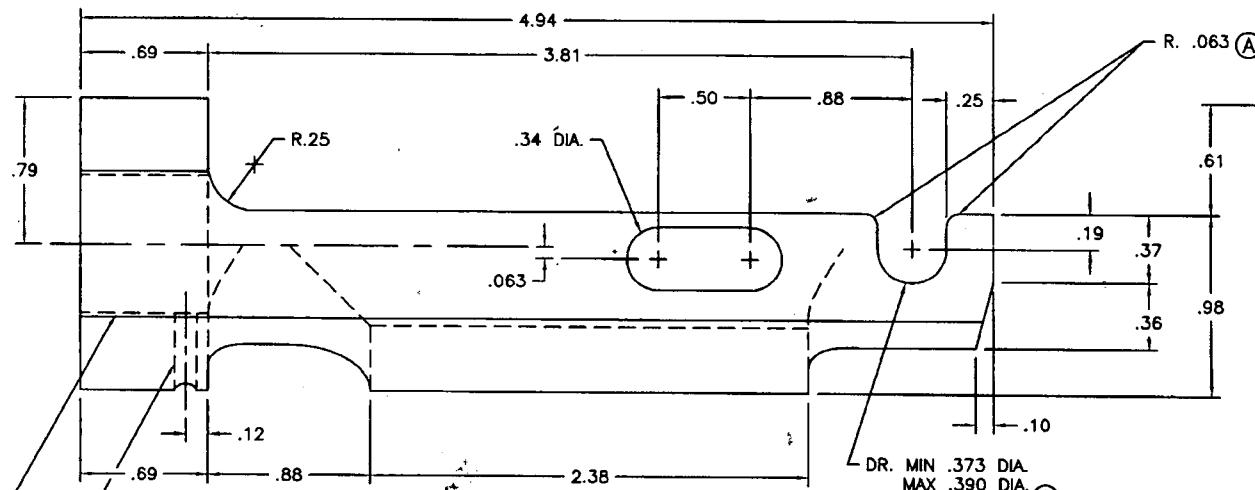
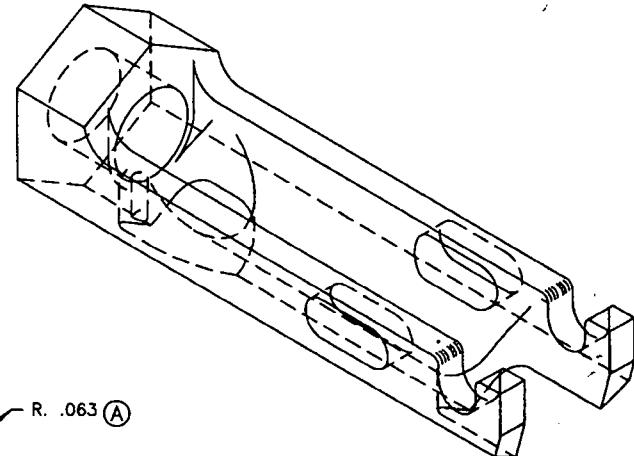
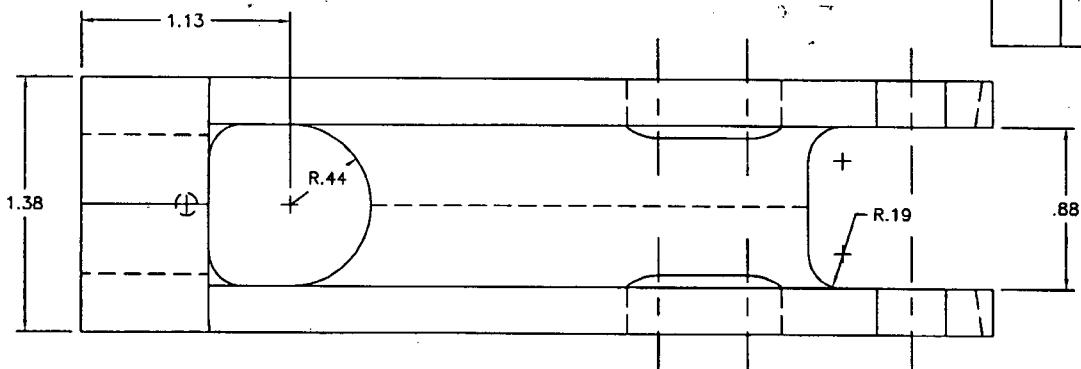
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
070402	7.0	Parts were anodized Per Mil-A-8625F1-Type1-Class2 Per QSI 017, instead of AS Per Dwg, Mil-A-8625-Type11-Class 2	MM 07.04.13	Parts are acceptable per eng. approval. AS Per Bill. MM		J	MM as per QSI 017 07.04.13	MM 07.04.13 070402

NOTE: Date & initial all entries

REVISION

LETTER	DFTSMAN	DATE	APPROVED	DATE
A	DNN	2/17/03		
ADDED SMOOTH EDGES TO -001 & -003; REDUCED LENGTH OF -003 BY .125"; ADDED DRAIN HOLE TO -001; INCREASED DIA. OF AFT SLOT ON -001.				
MINOR CHANGE - FAR 21.95 CHECK D. MURPHY 2/17/03				



-001 TUBE

NO. REQ'D PER ASSY	1	MS21209F4-15	INSERT				
		-005	PIVOT ARM	1.00 DIA. x 3.56	2024-T4, T351 ALUM.		
		-003	LATCH	1.11 x 3.50	2024-T4, T351 ALUM.		
		-001	TUBE	1.38 HEX STK. x 4.94	2024-T4, T351 ALUM.		
		-005	PART NO.	NAME	STOCK SIZE	MATERIAL	MATL.SPEC
							ZONE

LIST OF MATERIAL

PROPRIETARY RIGHTS NOTICE		UNLESS OTHERWISE SPECIFIED X.±.1 YOL.±.03 ZOL.±.010 ANGLES ±.1/2"	DFTSMAN CHECK STRESS PROJ. ENGR.	D. NELSON D. MURPHY 2/18/02 2/18/02	TITLE STEP ACTUATOR COMPONENTS	DWG. SIZE C SCALE 2:1	REV. A
ITEM NO.	DESCRIPTION						
2	41232-200-001						
	NEXT ASSEMBLY						
	REV. A						

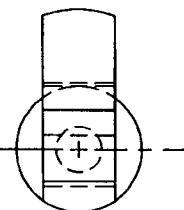
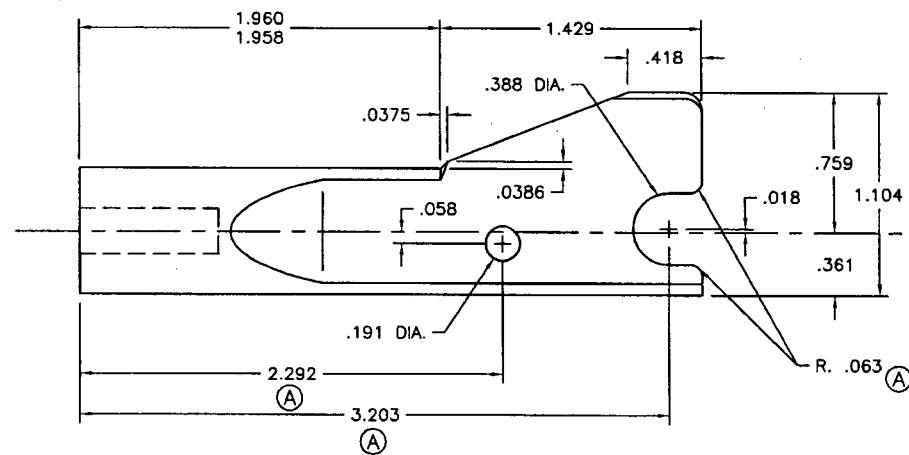
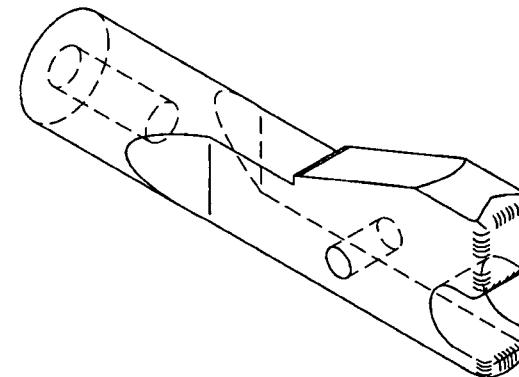
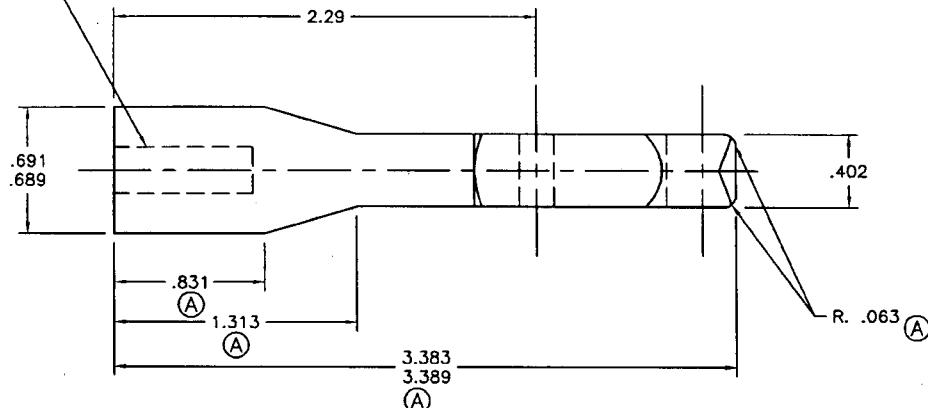
3/4"-20 THD.

SHOP COPY
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
NO. 31019
WORK ORDER

ANODIZE IN ACCORDANCE WITH MIL-A-8625, TYPE III, CLASS 2
DYED BLACK.

NOTE:

.625 + 1/16/-000
DRILL DEPTH TO 1.000 MAX
AS NEEDED FOR THREAD.



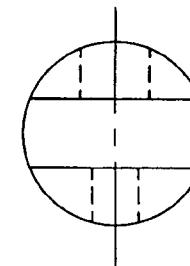
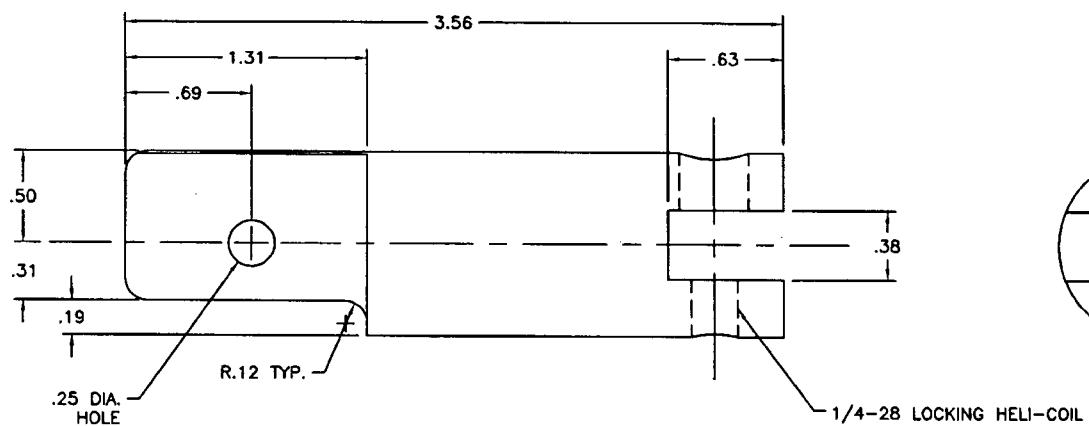
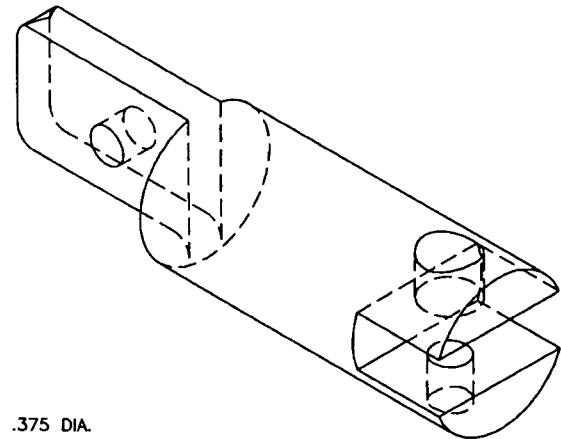
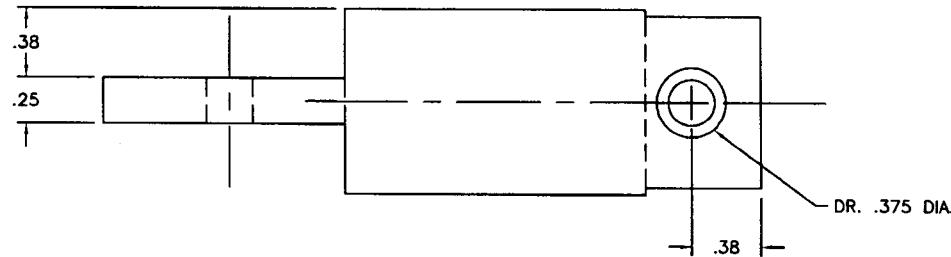
-003 LATCH

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NO. 3103

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ERA Aviation, Inc.

TITLE		SIZE	DRAW. NO.	REV.
STEP ACTUATOR COMPONENTS	C	41232-200-002 SHT 2 OF 3	A	



-005 PIVOT ARM

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NO. 3101
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Era Aviation, Inc.

TITLE	STEP ACTUATOR COMPONENTS	REV.
SPEC. NO.	C	A
41232-200-002		
SHT 3 OF 3		

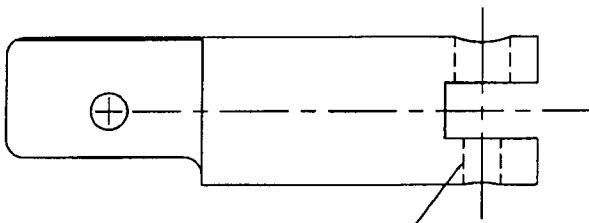
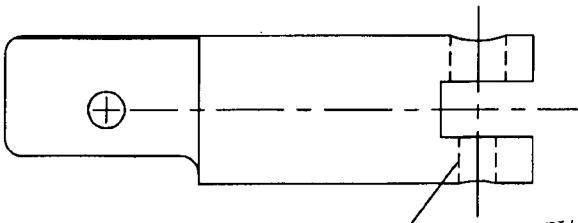
DATE 2/26/04	ENGINEERING ORDER		E.O. No. B-1	SHT. <u>1</u> OF <u>1</u>
BY D. NELSON	TITLE STEP ACTUATOR COMPONENTS		DWG. AFFECTED 41232-200-002	
APPROVED BY			SHEET AFFECTED SHT 1 & 3	
REASON FOR CHANGE: CHANGED DASH NO. OF INSERT ON L/M; CHANGED INSERT CALLOUT ON -005 PIVOT ARM.				
MINOR CHANGE - FAR 21.95				

IS

1	MS21209F4-10	INSERT
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WAS

1	MS21209F4-15	INSERT
---	--------------	--------

ISMS21209F4-10
INSERT-005 PIVOT ARMWAS

1/4-28 LOCKING HELI-COIL

SHOP COPY
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ENGINEERING
UNCONTROLLED COPY
-005 PIVOT ARM SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 31019

CHANGE REQUIRED:	DATE:	BY:	YES	NO
TRAVELER				
INSTALLATION INSTRUCTIONS				
MAINTENANCE INSTRUCTIONS				
ILLUSTRATED PARTS				
UNINCORPORATED DRAWING LIST				
MASTER DRAWING LIST				
COMPUTER DATA BASE				

DART AEROSPACE LTD	Work Order:	
Description: TUBE	Part Number:	11232-200-002-
Inspection Dwg:	Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.38	+/-0.30.	1.375	-			
1.13	+/-0.30.	1.127	-			
.88	+/-0.30.	.876	-			
4.94	+/-0.30	4.940	-			
3.81	+/-0.30.	3.807	-			
.690	+/-0.30	.690	-			
.690	+/-0.30	.691	-			
.88	+/-0.30.	.878	-			
.12	+/-0.30	.128	-			
.50	+/-0.30	.500	-			
.25	+/-0.30	.257	-			
.37	+/-0.30	.369	-			
.98	+/-0.20	.983	-			
.373-.390		.374	-			
2.38	+/-0.30.	2.380	-			
.34	+/-0.30.	.340	-			
Ø.12	= .005	.125	-			

Measured by:		Audited by:		Prototype Approval:	
Date:	07-03-20	Date:	07-03-20	Date:	

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/RF	

TNM

ANODISATION et PEINTURE TNM INC.

**PACKING
SLIP**

21 chemin de l'Aviation, QC H9R 4Z2
Telephone: (514) 429-7777 Fax: (514) 429-5108
Certifié ISO 9001-2000 / ISO 9001-2000 certified
Certifié NADCAP / NADCAP certified

54032

23-Mar-2007

CLIENT / CUSTOMER:

DART AEROSPACE LTD.

1270 ABERDEEN STREET

HAWKESBURY ONTARIO

K6A 1K7

**PURCHASE ORDER/
NO. DE COMMANDE:** 00003360

1	9	9	41232-200-002-003	B31020
2	13	13	41232-200-002-005	B31021
3	13	13	41232-200-002-001	B31019

E Pos/03/27

PICKED UP BY / REÇU: _____

En cas de perte ou de dommages dû à la valeur intrinsèque de certaines responsabilité se limitera à deux fois la valeur du traitement des pièces perdues ou endommagées.

Due to the intrinsic value of some parts, we are only liable for loss or damage to twice the invoiced finishing costs.

TNM

ANODISATION et PEINTURE TNM INC.

21 chemin de l'Aviation, Pointe Claire QC H9R 4Z2

Telephone: (514) 429-7777 Fax: (514) 429-5108

Certifié ISO 9001-2000 / AS9100 certified

approuvé NADCAP approved

C. OF C

54032

23-Mar-2007

CLIENT / CUSTOMER:

DART AEROSPACE LTD.

1270 ABERDEEN STREET

HAWKESBURY , ONTARIO

K6A 1K7

CERTIFICATE OF COMPLIANCE CERTIFICAT DE CONFORMITE

PURCHASE ORDER/
NO. DE COMMANDE: 00003360



1 9 41232-200-002-003 B31020

REV: A

BLACK ANODIZE PER MIL-A-8625F1 TYPE I CLASS 2

2 13 4123-200-002-005 B31021

REV: A

BLACK ANODIZE PER MIL-A-8625F1 TYPE I CLASS 2

3 13 41232-200-002-001 B31019

REV: A

BLACK ANODIZE PER MIL-A-8625F1 TYPE I CLASS 2

REQUIREMENTS HAVE BEEN IN ACCORDANCE WITH MD-INC P.R.I.D.E. MANUAL

Nous certifions que les pièces énumérées ont été traitées, testées et inspectées selon les spécifications mentionnées.
Les cartes de travail ont été remplies et sont disponibles pour consultation, sur demande.

All parts are processed, tested, and inspected to the requirements of above specifications.

Travel cards have been filed and are available for viewing upon request.

Signature/Signed:

A handwritten signature in black ink, appearing to read 'J. L. J. J.' followed by a large stylized 'VII'. To the right of the signature is a circular stamp with the letters 'TNM' at the top and 'VII' at the bottom.

Directeur de la Qualité / Q.A. Manager